

COUNTRY ANALYSIS BRIEFS

East China Sea

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The East China Sea is abundant in natural resources such as oil and natural gas.

Background

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Areas of the East China Sea are abundant in oil and natural gas deposits, which has resulted in tension between [China](#) and [Japan](#) as both seek to claim the resources for themselves. [Taiwan's](#) claim parallels China's, but Taiwan has not actively pursued the resources. According to EIA estimates, [China's oil consumption](#) will increase 3.8 percent annually through 2030, to roughly 15 million barrels per day. Japan's interest reflects the fact that Japan has virtually no domestic oil or gas reserves and is heavily dependent upon imports for its oil and gas needs. Japan is expected to consume 5 million barrels per day by 2030.

The East China Sea is an area of 480,000 square miles to the east of China, north of Taiwan, west of Japan's Ryuku islands, and south of [South Korea](#). The eight Daiyou/Senkaku (Chinese name/Japanese name) Islands are to the northeast of Taiwan, the largest island is two miles long and less than a mile wide. Though incapable of sustaining life, the islands are important for strategic and political reasons, as claims of ownership are used to bolster claims to the surrounding sea and its resources.



The United Nations Convention on the Law of the Sea ([UNCLOS](#)) has not yet resolved ownership disputes in the East China Sea. The 1982 convention created a number of guidelines concerning the status of islands, continental shelves, exclusive economic zones (EEZ), enclosed seas, and territorial limits. UNCLOS states that countries with overlapping claims must resolve them by good faith negotiation (see [South China Sea](#) brief for another example).

The large number of conflicting claims resulted in the creation of the Commission on the Limits of the Continental Shelf ([CLCS](#)). Established in 1997, the CLCS' purpose is to, "... facilitate the implementation of the United Nations Convention on the Law of the Sea (the Convention) in respect of the establishment of the outer limits of the continental shelf beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured." It is unclear when the CLCS will rule on the East China Sea dispute.

Oil & Natural Gas

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Development of oil and natural gas resources in the East China Sea are in the

Oil

[Entire East China Sea](#)

early stages, despite the absence of resolution as to ownership.

Oil reserve estimates for the East China Sea vary within the same general range. Official Chinese unproven oil reserve estimates tend to vary and tend to be high, at 70 to 160 billion barrels of oil (Bbbl) for the entire East China Sea. Foreign estimates fall closer to the middle of that range at 100 Bbbl.

Uncontested Area of the East China Sea

Pinghu is a field located 230 miles (just under 200 nautical miles) southeast of Shanghai and is owned by Shanghai Petroleum and Natural Gas Company Limited, a joint venture between a branch of the Chinese National Offshore Oil Corporation (CNOOC; 30 percent), the Shanghai government (30 percent), and China Petroleum and Chemical Corporation (Sinopec; 40 percent). According to 2006 CNOOC estimates, Pinghu's oil reserves are 2.4 million barrels (MMbbl), a small fraction of the estimated total for the East China Sea. For the financial year ending 2006, Pinghu produced an average of 1,422 barrels per day.

Contested Areas of the East China Sea

The Xihu/Okinawa (Chinese name/Japanese name; X/O) trough basin (about 620 miles long, 3300 to 6500 feet deep) is the area between [China](#) and [Japan](#) around which both countries are currently concentrating oil extraction efforts, the median line concept being unofficially adhered to by both countries. Chinese oil companies estimate the X/O trough basin holds over 20 MMbbl.

Contested fields in the X/O area are Canxue, Baoyunting, Chunxiao, Duanqiao, Wuyunting, and Tianwaitian. On occasion, Chunxiao is used as a reference for all fields in the area. According to a 2006 CNOOC report, the fields and their estimated reserves are:

Field	Estimated Oil Reserves (MMbbl)
Canxue	5
Baoyunting	4.5
Chunxiao	3.8
Duanqiao	2.2
Wuyunting	1.9
Tianwaitian	0.5
Total	17.9

In 2006, Tianwaitian produced 42 bbl per day. CNOOC and China Petroleum and Chemical Corporation (Sinopec) are equal shareholders for oil projects in the X/O region.

Natural Gas

Entire East China Sea

Unproven natural gas reserve estimates of the entire East China Sea have grown. An official Japanese survey in 1970 put unproven reserves at nearly 7 trillion cubic feet (Tcf). 2005 Chinese unproven estimates for the East China Sea tend to vary and be high, ranging from 175 to 210 Tcf.

Uncontested Area of the East China Sea

The Pinghu gas field supplies Shanghai with natural gas. Field operation began in 1999, and the field's gas reserves are estimated to be nearly 26 billion cubic feet (Bcf), a small fraction of the estimated total for the East China Sea. In 2006, gas production averaged 17 million cubic feet (MMcf) per day.

Contested Areas of the East China Sea

The X/O basin, according to official Chinese estimates, has reserves of nearly 17.5 Tcf of natural gas. China has identified gas deposits in the X/O trough region, roughly 280 miles (240 nautical miles) southeast of Shanghai. Chunxiao is the largest Chinese gas field and is used on occasion to reference all fields in the area: Baoyunting, Tianwaitian, Duanqiao, Canxue, and Wuyunting. According to CNOOC, the fields and their estimated reserves are:

Field	Estimated Gas Reserves (Bcf)
Chunxiao	168.6
Baoyunting	85.9
Tianwaitian	34.8
Duanqiao	32.6
Canxue	25.4
Wuyunting	16.6
Total	363.9

Chinese gas production is currently underway. Tianwaitian began production in the first half of 2006 and as of April 2007 produced 17.65 MMcf per day. Chunxiao, located just 3 miles west of the median line, will eventually link via pipeline to Tianwaitian from where both platforms' gas will travel via pipeline roughly 600 miles to an onshore terminal at Ningbo. CNOOC and Sinopec are equal shareholders for natural gas projects in the region.

Japan

Japan is concerned that production at the Chunxiao field is depleting resources from its side of the median line. In the summer of 2005 Japan authorized Teikoku Oil Company to begin exploratory drilling. In September of 2005, Teikoku sent the Ramform Victory to conduct seismic surveys in the X/O trough, but the ship left the area upon the appearance of Chinese warships. Further plans for exploration are on hold pending discussions between Teikoku and the Japanese government regarding the protection of Teikoku's workers.

Territorial Issues

Related: [South China Sea](#)

China and Japan dispute ownership of significant portions of the East China Sea, and the disputed areas involve oil and natural gas resources.

The dispute between [China](#) and [Japan](#) over the resources in the East China Sea revolves around two issues: demarcating the sea boundary between each country and sovereignty over the Daiyou/Senkaku Islands. [Taiwan's](#) claim parallels China's, particularly with regard to the Daiyou/Senkaku Islands, but Taiwan has not actively pursued the resources. Bureau chief-level negotiations between China and Japan to resolve the territorial claims began in late 2004; five of the currently eleven rounds of talks were held in 2007.

Demarcating the sea boundary

The UN Convention on the Law of the Sea ([UNCLOS](#)) defines both an Exclusive Economic Zone (EEZ) and a continental shelf. Japan defines its boundary as the UNCLOS EEZ extending westward from its southern Kyushu island and Ryuku islands. China defines its boundary using the UNCLOS continental shelf, but extends its territorial claims using the concept of a natural extension of its continental shelf. The overlapping claims amount to nearly 81,000 square miles, an area slightly less than the state of Kansas. Japan has proposed a median line (a line drawn equidistant between both countries EEZs) as a means to resolve the issue, but this has not proven acceptable to China.



Daiyou/Senkaku Islands

Japan occupies the Daiyou/Senkaku Islands (Chinese name/Japanese name; DSI), but both China and Taiwan claim them. The complexity of sovereignty over DSI begins in the closing decade of the 19th Century. Until the Sino-Japanese War, Taiwan, as part of China, was in charge of the management of the Daiyou islands. At the conclusion of the Sino-Japanese War in 1895, Japan assumed control of Taiwan and DSI. Upon Japan's defeat in WWII, Taiwan was returned to China, but no specific mention was made of DSI in any subsequent document. The conclusion of the Chinese Civil War in 1949 saw Taiwan's Kuomintang proclaim themselves the rightful rulers of Taiwan and China (Republic of China; ROC). Mainland China's Communists proclaimed Taiwan part of China (People's Republic of China; PRC).

Little attention was given towards DSI sovereignty until 1969 when a UN report indicated possible

large hydrocarbon deposits in the waters around DSI. In June 1971, the [United States](#) and Japan signed the Okinawa Reversion Treaty which included DSI as part of the Okinawa islands to be returned to Japanese control; the treaty was quickly challenged by both the PRC and the ROC. In September 1970, a Taiwanese gunboat planted a flag on DSI, generating strong protests from both China and Japan. In 1978, Japanese civilians erected a lighthouse on the largest island in DSI. Due to typhoon activity in the area, repair and reconstruction of the lighthouse has since been permitted by the Japanese government. To date, the sovereignty of the islands remains contested.

Mediation Efforts

The first bilateral talks between China and Japan over East China Sea issues began in October of 2004 ([timeline of talks](#)); Taiwan has not participated in any discussions. Over the course of three years, China and Japan have exchanged ideas to resolve the East China Sea dispute, but to date, no accord has been reached. Japan has consistently requested seismic data from China on its X/O fields and requested that China desist production until an agreement can be reached. China has consistently rejected this claim, insisting that the X/O Trough is within its territorial sovereignty.

Both China and Japan have offered joint development of the resources as a means of moving forward with development, but the areas in which joint development has been offered have not been agreed to. China has offered joint development of the gas fields north of DSI, sidestepping the sovereignty issue. Japan has offered joint development of the Chunxiao/Shirakaba gas field, sidestepping the sea boundary dispute. To date, neither side has accepted the other's offer.

Timeline of Official Talks

N ^o	Date	Location	Chinese Chair ¹	Japanese Chair ²	Action
1	2004, October	Beijing, China	Cui Tiankai	Mitoji Yabunaka	Official East China Sea talks begin; Japan asks for seismic data of Chunxiao fields; China offers joint development; no resolution
2	2005, May	Beijing	Cui Tiankai	Kenichiro Sasae	China offers joint development, Japan asks China to stop drilling east of median line; no resolution reached
3	2005, October	Tokyo, Japan	Cui Tiankai	Kenichiro Sasae	Japan offers joint development; China says X/O* trough drilling is within its sovereign territory; no resolution reached
4	2006, March	Beijing	Hu Zhengyue	Kenichiro Sasae	China offers joint development of DSI ^Δ fields, Japan offers joint development of X/O fields and requests cessation of drilling on X/O fields; Both sides agree to study respective proposals
5	2006, May	Tokyo	Hu Zhengyue	Kenichiro Sasae	No agreements
6	2006, July	Beijing	Hu Zhengyue	Kenichiro Sasae	Japan requests cessation of drilling in X/O & requests information on fields; Both sides agree to form a panel of experts to help resolve disputes
7	2007, March	Tokyo	Hu Zhengyue	Kenichiro Sasae	No agreements
8	2007, May	Beijing	Hu Zhengyue	Kenichiro Sasae	No agreements
9	2007, June	Tokyo	Hu Zhengyue	Kenichiro Sasae	No agreements
10	2007, October	Beijing	Hu Zhengyue	Kenichiro Sasae	No agreements
11	2007, November	Tokyo	Hu Zhengyue	Kenichiro Sasae	No agreements

¹ = Director-General, Department of Asian Affairs, Ministry of Foreign Affairs; ² = Director-General, Asian and Oceanian Affairs Bureau, Foreign Ministry; * = Xihu/Okinawa; ^Δ = Daiyutai/Senkaku Islands

Links

EIA Links

[China Country Analysis Brief](#)
[China Country Energy Profile](#)
[Country Analysis Briefs - East Asia and South Asia](#)
[EIA - Energy Supply Security](#)
[Japan Country Analysis Brief](#)
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[South China Sea Analysis Brief](#)
[Taiwan Country Analysis Brief](#)
[Taiwan Country Energy Profile](#)

General Information

[GlobalSecurity.org - Senkaku/Diaoyutai Islands](#)
[Ministry of Foreign Affairs of Japan - Japan-China Relations](#)
[New York University - Sea Power, Law of the Sea, & the Sino-Japanese East China Sea "Resource War"](#)
[Silk Road Studies - China's Energy Security Demands and the East China Sea: A Growing Likelihood of Conflict in East Asia?](#)
[United Nations - Commission on the Limits of the Continental Shelf](#)
[United Nations - Convention on the Law of the Sea](#)
[Wilson Center - Seabed Petroleum in Northeast Asia: Conflict or Cooperation?](#)

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